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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,003	11/13/2001	Satoshi Seo	740756-2389	6380
31780	7590	11/16/2004	EXAMINER NEGRON, ISMAEL	
ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165			ART UNIT 2875	PAPER NUMBER

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/987,003

**Applicant(s)**

SEO, SATOSHI

**Examiner**

Ismael Negron

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-93 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 12-15, 23-28, 36-41, 49-51, 59-61 and 69-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAWAMI et al. (U.S. Pat. 5,882,761) in view of SOUTHWICK, Jr. (U.S. Pat. 2,578,324).

KAWAMI et al. discloses an illumination device having:

- **a container sealed off from the atmosphere**, Figure 1, reference number 10;
- **an organic electro luminescent element (OELE) located in the container**, Figure 1, reference number 4;
- **a drying agent located in the container**, Figure 1, reference number 8;
- **the drying agent chemically absorbing moisture and maintaining its solid state after the moisture absorption**, column 4, lines 35-37;
- **the drying agent including one of an alkaline metal oxide and an alkaline-earth metal oxide**, column 4, lines 43-47;

- **the drying compound including sodium oxide ( $\text{Na}_2\text{O}$ ), column 4, lines 48 and 49;**
- **the drying compound including calcium oxide ( $\text{CaO}$ ), column 4, line 51;**
- **the container including a substrate formed separately from the OELE, Figure 1, reference number 7;**
- **the drying agent being in contact with the substrate, Figure 1;**
- **the container having a concave inner portion where the drying agent is contained, Figure 1, reference number 11; and**
- **the illumination device being incorporated into an OELE display device, column 1, lines 6-9.**

KAWAMI et al. discloses all the limitations of the claims, except the drying agent including a porous seal having a porosity of 20% or more.

SOUTHWICK, Jr. discloses a drying pouch having a drying agent (Figure 3) contained inside a porous pouch (Figure 4), such porous pouch consisting of two layers of a porous material (Figure 2).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include the porous layers of SOUTHWICK, Jr. in the OELE of KAWAMI et al. to further protect the OELE from moisture trapped by the desiccant material as suggested by SOUTHWICK, Jr. (column 2, lines 20-27). It is further noted that KAWAMI et al. discloses the space separating the OELE 6 and the

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desiccant material 8 being filled by a dried inert gas. The inert gas is used to isolate the drying substance 8 from the OELE 6, while providing permeability to moisture.

Regarding the porosity of the porous seal of SOUTHWICK, Jr. being 20% or more, one of ordinary skill in the art at the time the invention was made would have recognized the "tissue paper" and "Kraft paper" of SOUTHWICK, Jr. to have a porosity well into the claimed range. Even if such one of ordinary skill failed to recognize the properties of the disclosed papers, the claimed range would still be obvious in light of SOUTHWICK, Jr. statements regarding the "Kraft paper" being "very porous" and having "enhanced water vapor transmission characteristics" (column 3, lines 49-55).

2. Claims 5-11, 16-22, 29-35, 42-48, 52-58, 62-68 and 86-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAWAMI et al. (U.S. Pat. 5,882,761) in view of SOUTHWICK, Jr. (U.S. Pat. 2,578,324).

The combined teachings of KAWAMI et al. and SOUTHWICK, Jr. disclose, or suggest in combination (see Section 3 of the instant Office Action) all the limitations of the claims, except the illumination device being incorporated in one of a video camera, a digital camera, an image reproduction apparatus, a portable computer, a mobile telephone, a personal computer and an acoustic equipment.

The examiner takes Official Notice that the use of OELE devices is old and well known in the illumination art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the OELE of KAWAMI et al. and SOUTHWICK, Jr. in one of the cited apparatus. One would have been motivated since OELE are recognized in the illumination art to have many desirable advantages,

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including reduced size and thickness, high efficiency, low power consumption, long life, resistance to vibrations, and low heat production, over other light sources. See Section 5 of the instant Office Action.

### ***Response to Arguments***

3. Applicant's arguments filed October 5, 2004 have been fully considered but they are not persuasive.

4. Regarding the Examiner's rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over KAWAMI et al. in view of SOUTHWICK, Jr., the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically the drying agent *comprising* as a porous body having a porosity of 20% or more.

In response to applicant's arguments that the cited combination of references fail to disclose individually, or suggest when combined, a drying agent formed as the claimed porous body, the applicant is advised that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974). In this case, the drying agent structure of SOUTHWICK, Jr. *includes* a body having the claimed porosity. Incorporating the drying agent structure of SOUTHWICK, Jr. into the OELE of KAWAMI et al. would have been obvious improvement, as detailed in Section 1 of the instant Office Action.

The Examiner recognizes that the subject matter disclosed by the instant application features the drying agent formed as a porous body having a porosity of 20%

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or more, however, the language of the claims is sufficiently broad to read on the combined teachings of KAWAMI et al. and SOUTHWICK, Jr.. having the porous body physically separate from the drying agent, but still forming part of its structure. The Examiner suggests amending the last recitation of Claim 1 to read "wherein the drying agent comprises is formed as a porous body having a porosity of 20% or more."

However, while the proposed amendment would positively recite the porous body as being one and the same as the drying agent, it would fail to overcome the obviousness rejection of the 20% or more porosity range, in light of SOUTHWICK, Jr. statements regarding the advantages of a relatively high porosity value.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

  
**JOHN ANTHONY WARD**  
PRIMARY EXAMINER

  
Inr

November 12, 2004